Improving the "Geology Talk"

By Jim F. Wood

NATIONAL PARKS house the icons of America's geologic heritage, comprising what is arguably the world's greatest educational rock collection, but geology can be a difficult subject to present to the public. In March 2003 a two-day workshop was held at the National Science Teachers Association conference in Philadelphia to help participants from 25 parks and several central offices improve their skills and knowledge in communicating geologic stories and issues.

The topics covered in the workshop included planning for natural resource issue interpretation, making geology relevant, using geologic themes, the nature of science, and controversial issues in geoscience. All workshop participants shared examples of projects from their parks and several invited speakers gave special presentations.

Bob Lillie, National Park Service seasonal interpreter and professor at Oregon State University, gave an overview of national park geology using regional geologic setting and modern landform analogies to make park geology more understandable. Phil Zichterman, chief of interpretation, education, and technology at Curecanti National Recreation Area, demonstrated new low-cost technology that parks can use to create quality video for educational projects on the Web or on a DVD player. Allyson Mathis, interpreter at Grand Canyon National Park, presented a suite of interpretive techniques for geology programs and led discussions on the nature of science and controversial issues for frontline interpreters.

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Workshop participants also learned about "Views of the National Parks" from Dave Krueger, information technology specialist with the Natural Resource Information Division. An interactive, educational computer application, Views presents general information and scientific principles on Web pages and CD-ROMs (see www2.nature.nps.gov/synthesis/views). Geology-related themes designed in the past year include volcanism, glaciers, paleontology, and coastal geology. Thematic geology modules prepared in Views become building blocks that any park can use as a starting point to tell its own unique geologic story.

Views takes the user to a park through multimedia presentations and interactive educational units that help to ensure that park programs reach a greater number of people, including those who are unable to visit park sites or attend a ranger-led program. Geology-related virtual experiences have been prepared for Pu'uhonua o Honaunau National Historic Park (Hawaii) and Timpanogos Cave National Monument (Utah). Several others are being prepared, including Florissant Fossil Beds (Colorado) fossil mysteries, Grand Canyon (Arizona) river-to-rim geology, and geology on the National Mall (Washington, D.C.).

A core concept for the workshop was the four-step method for planning and evaluating natural resource issue interpretation, as described in the 1995 National Park Service report "Interpreting Critical Natural Resource Issues in Canadian and United States National Park Service Areas." These steps include identifying the issue, determining the message, targeting the message, and determining techniques. Report author Mike Whatley, chief of the Natural Resource Information Services Branch, led the group in activities using the four-step method to evaluate existing programs and frame new proposals.

Interpreting geology to national park audiences is a specialized skill. In March, NPS staff participated in a two-day workshop to improve their abilities and knowledge in communicating geologic stories and issues.

By conducting the workshop in conjunction with the National Science Teachers Association conference, National Park Service interpreters had the opportunity to attend the larger meeting, exposing them to a number of useful educational techniques, inexpensive sources and supplies, and a network of teacher contacts.

The Geologic Resources Division, the Natural Resource Information Division, and workshop presenters are developing a manual on communicating geologic stories and an issues handbook to deliver the information to those who could not attend the workshop. The Natural Resource Information Division also plans to use the geology workshop as a model for future workshops on natural resource topics. ■

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